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PATENT AND TRADEMARK LAWYERS

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January 11, 2004

VIA FAX TO 011-49-89-2399-4465

International Preliminary Examining Authority
European Patent Office
D-80298
Munich, Germany

Dear Sirs:

Re: **INTERNATIONAL APPLICATION NO. PCT/CA 03/01074**
INTERNATIONAL FILING DATE: July 17, 2003
Title: Apparatus for igniting a gas flare
APPLICANT: RASMUSSEN, Adair

The Applicant has received the Written Opinion report dated November 11, 2003 and wishes to submit amendments and arguments within the two month time limited which expires on **January 11, 2004**, so that the application will be ready for International Preliminary Examination which the Applicant intends to request prior to the deadline of February 22, 2004.

Please enter the following amendments:

Replace Claims pages 8 and 9 containing Claims 1 through 7 presently on file with new Claims page 8 containing Claims 1 through 5. Claim 1 has been amended in order to better distinguish the invention from the prior art cited in the International Search Report.

ARGUMENT

As set forth in the Background of the Invention, the present invention is intended to address problems encountered when trying to completely incinerate waste gas to achieve a "clean burn". The temperatures involved are in the range of 2000 to 2800 degrees Fahrenheit. Attempts to use discrete igniter elements failed, as they melted at such high temperatures. The solution proposed by the present invention is to make the entire body of the housing out of a heat conducting material and turn the entire housing into an "igniter".

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The cited art references are all still attempting to use discrete igniter elements. WO '351 uses a heating wire 20. US'981 uses igniter H (column 2 line 20). US'838 uses spark plugs 50/52 (column 3 line 8). FR'271 uses a heating wire 4, which is insulated by a protective covering 3 to increase its heat resistant. DE'543 uses a form of heating wire.



DOUGLAS B. THOMPSON
Agent for the Applicant

DBT/
Enclosures - 1 page

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. An apparatus (10) for igniting a gas flare, comprising:
5 a housing (12, 112) having a body (16, 124) made from a
 heat conducting material;
 at least one flow passage (14) extending through the
 body (16, 124); and
 means (18) for maintaining the body at a temperature
10 above an ignition temperature of a combustible mixture of
 combustion air and combustible gases, such that the
 combustible mixture passing along the at least one flow
 passage (14) is ignited immediately upon coming in contact
 with the body (16).
15
2. The apparatus as defined in Claim 1, wherein the body (16,
 124) is made from a ceramic material.
3. The apparatus as defined in Claim 1, wherein a heating
20 element (18, 126) embedded in the body (16, 124) serves as
 the means for maintaining the body (16) at a temperature
 above the ignition temperature of the combustible mixture.
4. The apparatus as defined in claim 1, wherein the housing
25 (112) has an inlet (114), an outlet (116), and at least one
 baffle (118) positioned within the housing (112) forms a
 plurality of interconnected flow passages (120) which
 collectively define a flow path (122) extending from the
 inlet (114) to the outlet (116).
- 30 5. The apparatus as defined in claim 4, wherein at least
 one fan (128) is provided to direct the combustible mixture
 from the inlet (114) toward the outlet (116).